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NONAPEPTIDE AND DECAPEPTIDE DERIVATIVES OF
LUTEINIZING HORMONE/RELEASING HORMONE

Abstract of the Disclosure

Nonapeptide and decapeptide analogs of LH-RH of the formula R_1

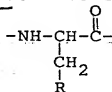
(pyro)Glu-His-V-Ser-W-X-Y-Arg-Pro-Z (I)

(I)

and the pharmaceutically acceptable salts thereof wherein:
 R_1 V is tryptophyl, phenylalanyl or 3-(1-naphthyl)-L-alanyl;

R_1 W is tyrosyl, phenylalanyl or 3-(1-pentafluorophenyl)-L-alanyl;

R_1 X is a D-amino acid residue



wherein R is

(a) a carbocyclic aryl-containing radical selected from the group consisting of naphthyl, anthryl, fluorenyl, phenanthryl, biphenyl, benzhydryl and phenyl substituted with three or more straight chain lower alkyl groups; or

(b) a saturated carbocyclic radical selected from the group consisting of cyclohexyl substituted with three or more straight chain lower alkyl groups, perhydronaphthyl, perhydrobiphenyl, perhydro-2,2-diphenylmethyl and adamantyl;

Y is leucyl, isoleucyl, nor-leucyl or N-methyl-leucyl;

Z is glycineamide or $\text{-NH-CH}_2\text{-R}^1$, wherein

R^1 is lower alkyl, cycloalkyl, fluoro lower alkyl or

-NH-C(=O)-NH-R^2 wherein

R^2 is hydrogen or lower alkyl,

are disclosed. These compounds exhibit potent LH-RH agonist properties.

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108.00CH